

FOTINI HALVATZIS  
IKER GIL

ILLINOIS INSTITUTE OF TECHNOLOGY  
COLLEGE OF ARCHITECTURE

# CONNECTING THE CIRCLE

ARCH 523 · MASTERS PROJECT PREPARATION · FALL 2012



## Case Statement



I-90/94 at I-290 Circle Interchange is located in the heart of downtown Chicago. Greektown is located to the northwest; the University of Illinois at Chicago is situated to the southwest, the Loop to the northeast, and the South Loop to the northwest. According to the American Transportation Research Institute and the Federal Highway Administration, the Circle Interchange is the slowest and most congested highway freight bottleneck in the nation with more than 300,000 vehicles traveling through the Interchange on a daily basis, and over 1,100 crashes reported on average per year.

Improvements to the highway are vital and currently in progress. IDOT and the Federal Highway Administration have hired AECON and TranSystems to conduct a \$40 million engineering study and analysis that identifies possible improvements, potential cost, and construction schedule of the Circle Interchange. While plans for these improvements are necessary and may provide long term benefits, their impact may negatively affect the adjacent communities both during construction and upon completion. People may be displaced from their homes, the already divided communities may be split even farther, and the improvements may lead to abandonment and decay of existing residencies and businesses.

The intent of this project is to develop an urban plan that encompasses the five distinct neighborhoods affected by the proposal for the new Circle Interchange and addresses both the new change in infrastructure and conceives of a way to knit, rather than split, the existing neighborhoods.

## Goals

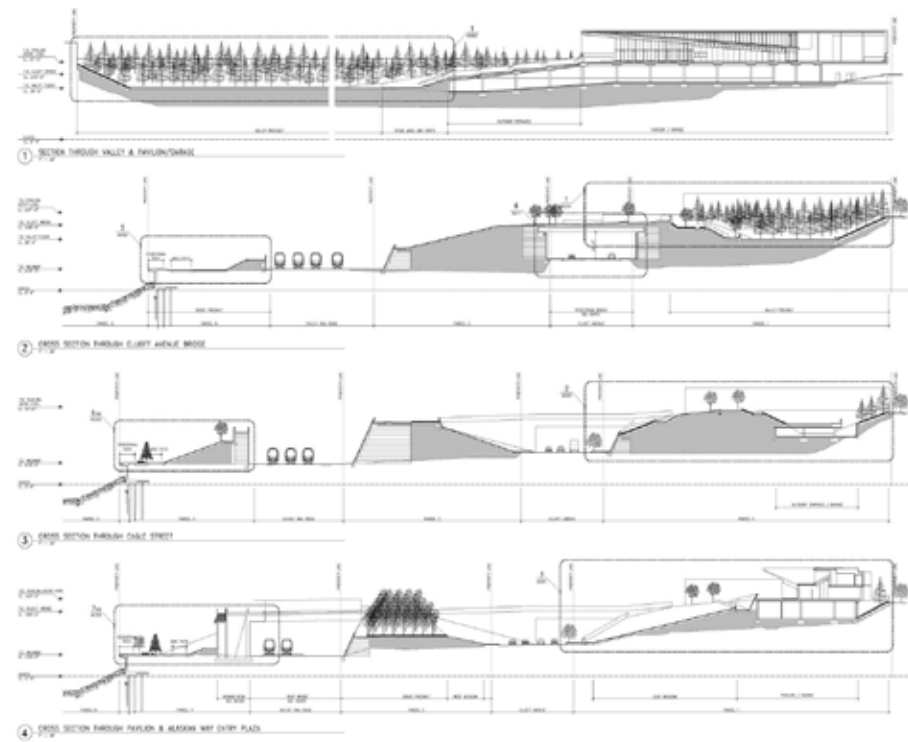
- Allow for the strong identity of each adjacent neighborhood, while creating strategic connections between them
- Provide a pedestrian friendly and safe environment without impeding traffic
- Strengthen and stimulate the development of existing communities
- Use sustainable and green methods
- Increase visual continuity, orientation, and identity
- Preserve open space, and natural beauty
- improving driver awareness

**Presedent:  
Olympic Structure Park**

Architects: Weiss/Manfredi  
Landscape Architect: Charles Anderson  
Location: Seattle, Washington, USA  
General Contractor: Sellen Construction  
Project Management: Barrientos LLC  
Client: Seattle Art Museum  
Project Year: 2001-2007

Envisioned as a new urban model for sculpture parks, this project is located on Seattle’s last undeveloped waterfront property – an industrial brownfield site sliced by train tracks and an arterial road. The design connects three separate sites with an uninterrupted Z-shaped “green” platform, descend-

ing forty feet from the city to the water, capitalizing on views of the skyline and Elliott Bay, and rising over existing infrastructure to re-connect the urban core to the revitalized waterfront.





**President:  
Boston Central Artery/  
Tunnel**

Urban Planners: SMWM  
Managed by: MA Turnpike Authority.  
Design and construction: Bechtel Corpora-  
tion and Parsons Brinckerhoff  
Project Year: 1991-2007

The Master Plan for the Boston Central Artery/Tunnel attempts to restore the built fabric of the downtown and reconnect the es-  
tranged neighborhoods. The mas-  
ter plan divides the corridor into  
districts, each with its own history,  
architecture, and constituency.  
The Central Artery/Tunnel Project  
(CA/T), known unofficially as the  
Big Dig, rerouted the Central Ar-  
tery (Interstate 93), the chief high-  
way through the heart of the city,  
into a 3.5-mile (5.6-km) tunnel. The  
project also included the construc-  
tion of the Ted Williams Tunnel  
(extending Interstate 90 to Logan  
International Airport), the Leon-  
ard P. Zakim Bunker Hill Memorial  
Bridge over the Charles River, and  
the Rose Kennedy Greenway in  
the space vacated by the previ-  
ous I-93 elevated roadway. Initially,  
the plan was also to include a rail  
connection between Boston's two  
major train terminals. The project  
concluded on December 31, 2007.





**Presedent:**  
**Klyde Warren Park**

Landscape Architect: The Office of James  
Burnett  
Location: Dallas, TX  
GC: McCarthy Building Company, Inc.  
General Contractor: Archer Western  
Project Mgt: Bjerke Management Solutions  
Project Year: 2009-2012



Five acres of shared, public green space will deck over the exist-  
ing Woodall Rodgers Freeway, bringing new traditions, shared  
experiences and fun to the cen-  
ter of Dallas.  
The 5.2-acre deck park will cre-  
ate an urban green space over  
the existing Woodall Rodgers  
Freeway between Pearl and St.  
Paul streets in downtown Dallas.  
Plans include a performance pa-  
vilion, restaurant, walking trails, a  
dog park, a children's discovery  
garden and playground, water  
features, an area for games and  
much more.  
Connectivity is central to The  
Park's purpose. The Park will  
promote increased pedestrian,  
trolley and bicycle use between  
Uptown, Downtown and the Arts  
District, contributing to a more  
walkable city center.  
The Park will create a front lawn  
for the surrounding cultural offer-  
ings including the Dallas Center  
for Performing Arts, the Dallas  
Museum of Art, the Morton Mey-  
erson Symphony Hall, the Nasher  
Sculpture Center, the Trammell  
& Margaret Crow Collection of  
Asian Art, Booker T. Washington  
High School for the Visual and  
Performing Arts and the future  
Museum of Nature and Science.



Stakeholders

- Residents – Will be directly affected by construction activities (nuisance, accessibility, noise, etc.)
- Business Owners – Will be directly affected by construction activities and access routes (accessibility, visibility, nuisance, financial interest, etc.)
- University of Chicago – Will be directly affected by construction activities. Its visibility and appeal may improve due to subsequent accessibility.
- IDOT – Responsible for highway improvements and safety (safety, construction cost, public relations, etc.)
- CDOT – City image, highway improvements and visibility
- Elected Officials – May be affected by community opposition to the project or may be positively affected for civil work initiated during their term (public relations)
- Commuters – Will be directly affected during construction and upon completion of the project (travel times, safety, road conditions, etc.)
- CTA – Will be indirectly affected by higher number of passengers during construction or lower number of passengers after construction. The blue line, running along Eisenhower Expressway may be directly affected during construction, as well as, CTA bus routes in the area. (Usage, financial interest, public relations, accessibility, etc.)

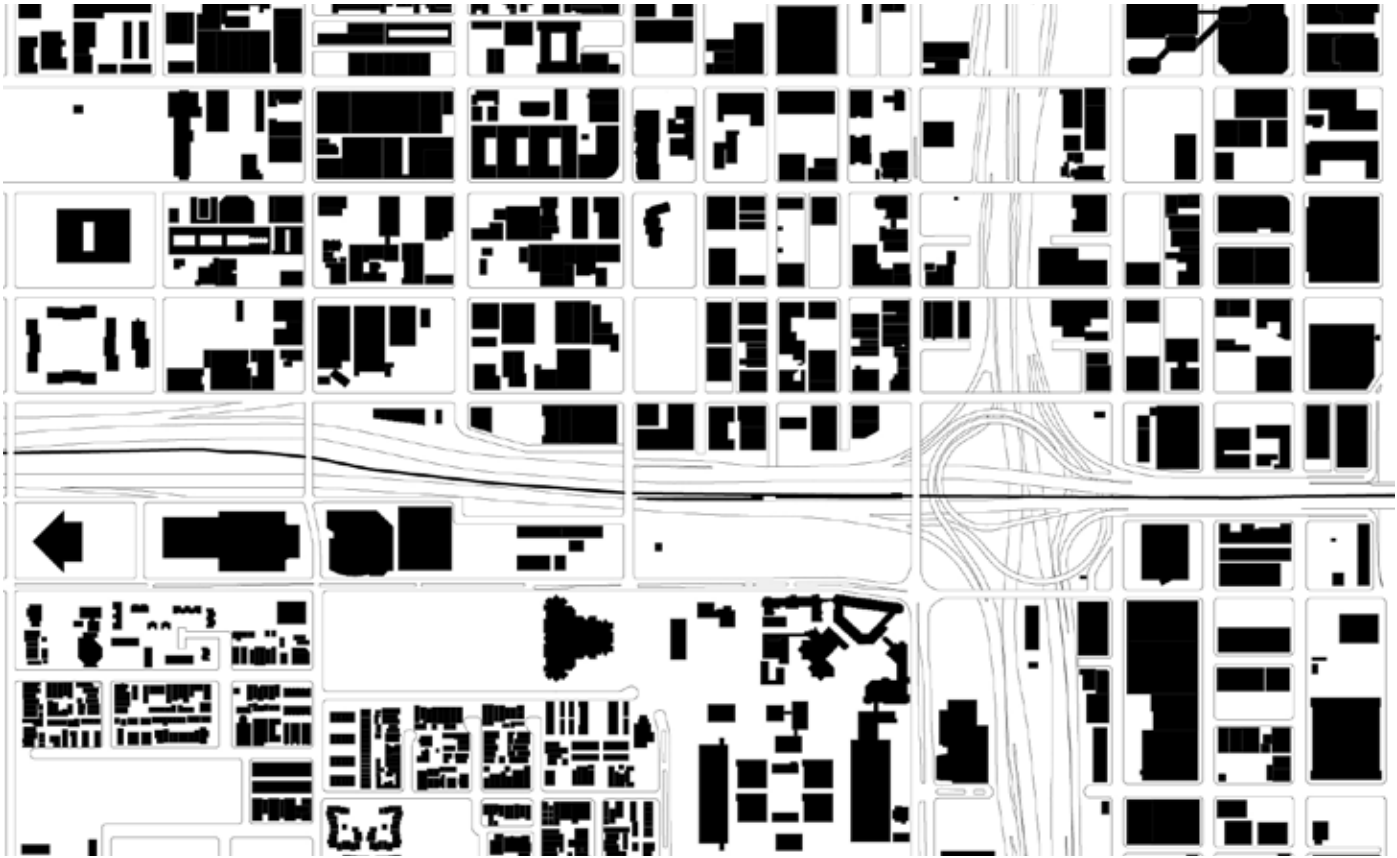
Site Selection

- Magnitude of infrastructure
- Existing demand for additional infrastructure to accommodate current and future traffic volumes
- Familiarity and site proximity
- Strong identity of existing communities
- Separation of existing communities
- Safety
- Lack of visual continuity, orientation, and identity
- Lack of existing open space, and sustainable and green methods of construction



Site Analysis  
History

Site Analysis  
Figure Ground



Site Analysis  
Transportation

Site Analysis  
Amenities & Parks



References & Bibliography

- Circle Interchange Project. The Illinois Department of Transportation (IDOT) and Federal Highway Administration (FHWA). Web. September 13, 2012. <http://www.circleinterchange.org/>
  - o The website is maintained by the Illinois Department of Transportation as an information source for the Circle Interchange Improvement Project. The website along with the organizations printed material will serve as my primary resource of current information on the project.
- Urbanized. Gary Hustwit, 2011. HD Video.
  - o The film is about the design of cities, which looks at the issues and strategies behind urban design and features some of the world's foremost architects, planners, policymakers, builders, and thinkers.
- Roger, Biles. "The new urban renewal: the economic transformation in Harlem and Bronzeville." Planning perspectives: PP, 2009 Apr., v.24, n.2, p.275-276. Periodical.
  - o The article is a case study of urban renewal approaches in the Harlem/Bronzeville area
- Designating the Urban Interstates Urban Design Principles. The U.S. Department of Transportation Federal Highway Administration. Web. September 14, 2012. <http://www.fhwa.dot.gov/infrastructure/urban-design.cfm>
- Manfredi, Michael & Weiss, Marion. Weiss/Manfredi: Surface/Subsurface. New York : Princeton Architectural Press, c2008. Book.
  - o The book takes a look at an interdisciplinary approach and a dynamic integration of architecture, art, infrastructure, and landscape design
- "Weiss/Manfredi: Seattle Art Museum: Olympic Sculpture Park." Weiss/Manfredi: Seattle Art Museum: Olympic Sculpture Park. Web. 19 Oct. 2012.
  - o Architects website about the Olympic Sculpture Park project.
- "OJB | Landscape Architecture | The Office of James Burnett." OJB | Landscape Architecture | The Office of James Burnett. Web. 19 Oct. 2012.
  - o Architect's website about the Klyde Warren Park project.
- Vanderwarker, Peter. The Big Dig: Reshaping an American City. Boston: Little, Brown and, 2001. Print.
  - o Book regarding the Big Dig project.

- "Economic and Transportation Impacts of the Central Artery/Tunnel in Boston | Highways | Library." Economic and Transportation Impacts of the Central Artery/Tunnel in Boston | Highways | Library. Web. 19 Oct. 2012.
  - o Article regarding the impacts of the highway on the economy.